

REMARKS

This is in response to the outstanding Office Action dated November 13, 2008. Claims 1 and 17 have been amended to correct typographical errors. The claims now pending in the application are 1-34. Applicant requests withdrawal of the outstanding rejections and allowance of the claims.

Amendment of the Specification

Applicant has amended the last paragraph on page 4, the last paragraph on page 6, the second paragraph on page 7 and the Abstract on page 17 to better define the invention. No new matter has been added.

Response to Rejection of Claims 1-16 Under 35 U.S.C. §103(a)

In the outstanding Office Action, claims 1-16 were rejected under 35 U.S.C. §103(a) as being unpatentable over Bompard et al. (U.S. No. 5,484,642) in view of Vane (U.S. No. 5,445,693). These rejections are respectfully traversed.

Independent claim 1 provides a fabric including a plurality of substantially parallel, aligned tows arranged in tow groups. Each of the tow groups has one or more tows. The spacing between tows in a tow group is less than the spacing between adjacent tow groups. Each tow has a longitudinal axis. The longitudinal axes of the tows are in a coplanar relationship.

The Examiner asserts the Bompard et al. reference discloses the structure and all of the limitations of Applicant's independent claim 1 except for the limitation that the fiber elements are tows. However, the Bompard et al. reference does not disclose the fabric as claimed in Applicant's independent claim 1 for several reasons.

First, the Bompard et al. reference does not teach a fabric having tows, wherein the longitudinal axes of the tows are in a coplanar relationship. Rather, the Bompard et al. reference discloses, as shown below in Figure 4 of the Bompard et al. reference, layers of fabrics or slivers (31, 32, and 33).

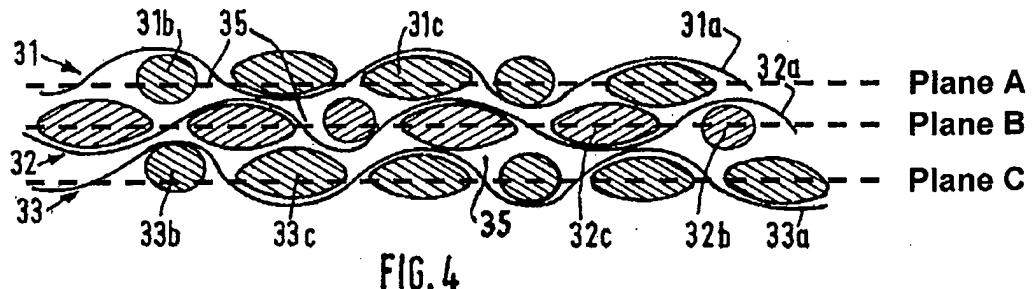


FIG. 4

As shown, sliver 31 forms a plane A, the sliver 32 forms a plane B and the sliver 33 forms a plane C. It is clear that plane A is different than plane B is different than plane C. There is simply no disclosure in the Bompard et al. reference of a fabric having tows, wherein the longitudinal axes of the tows are in a coplanar relationship as claimed in Applicant's independent claim 1.

Second, the Bompard et al. reference does not teach a fabric having tows arranged in tow groups, wherein the spacing between tows in a tow group is less than the spacing between adjacent tow groups. The Examiner asserts Figure 4 of the Bompard et al. reference discloses the spacing between the fiber elements (32c) within a tow group having a spacing that is less than the spacing between adjacent element groups. Applicant asserts Fig. 4 of the Bompard et al. reference, a portion of which is shown below, shows adjacent threads (32b and 32c) of the sliver 32.

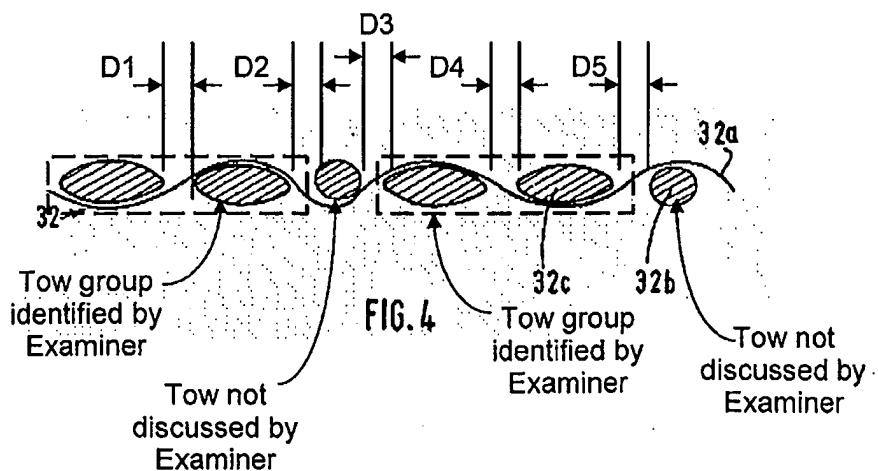


FIG. 4

Even if some of the adjacent threads (32b or 32c) are combined into a tow group as suggested by the Examiner, the resulting distances between the tow groups

and the remaining threads appears to be approximately the same. As shown above, D1 and D4 represent the distances between the tows of the tow groups as suggested by the Examiner. D2, D3 and D5 represent the distances between the suggested tow groups and the tows not discussed by the Examiner. Applicant asserts the distances, D1-D5 appear to be approximately the same. Applicant further asserts any tow groups, formed from any combination of the threads (32b and 32c), results in equal distances D1-D5. Further, the Bompard et al. Specification is silent as to the spacing of the tows or the tow groups. Accordingly, there is simply no disclosure in the Bompard et al. reference of a fabric having tows arranged in tow groups, wherein the spacing between tows in a tow group is less than the spacing between adjacent tow groups as claimed in Applicant's independent claim 1.

To overcome the deficiencies in the Bompard et al. reference, the Examiner relies on the Vane reference. The Examiner asserts the Vane reference teaches a reinforcing fabric which is formed from tows, yarns or threads.

However, even if the Bompard et al. reference and Vane reference are combined, as suggested by the Examiner, the resulting combination does not encompass the limitations of the invention as claimed in Applicant's independent claim 1 for several reasons.

First, a combination of the Bompard et al. and Vane references does not show a fabric having tows, wherein the longitudinal axes of the tows are in a coplanar relationship as claimed in Applicant's independent claim 1. Rather, a combination of the Bompard et al. and Vane references provides the multi-layered textile material of the Bompard et al. reference having fabrics or layers forming different planes with the reinforcing fabric of the Vane reference.

Second, the combination of the Bompard et al. and Vane references does not show a fabric having tows arranged in tow groups, wherein the spacing between tows in a tow group is less than the spacing between adjacent tow groups as claimed in Applicant's independent claim 1. Rather, a combination of the Bompard et al. and Vane references provides the multi-layered textile material of the Bompard et al. reference having fabrics or layers forming different planes with the reinforcing fabric

of the Vane reference. Further, neither the Bompard et al. nor the Vane references discloses any dimensional relationship between the fabrics, slivers, tows or tow groups.

It is well established that all claim limitations must be considered in judging the patentability of a claim against the prior art. As set forth in the MPEP, at least at §2143.03, in order to establish *prima facie* obviousness of a claimed invention, all of the claimed limitations must be considered against the prior art, citing *In Re Wilson*, 424 F.2d 1382, 165 USPQ 494 (CCPA 1970). In this regard, Applicant's independent claim 1 is non-obvious under 35 U.S.C. §103(a) in view of the Bompard et al. and Vane references. Therefore the rejection of independent claim 1 is not applicable and the claim is patentable as presented.

Further, on page 3 of the outstanding Office Action, the Examiner asserts it would have been obvious to choose a specific number of tows and space the tows with specific spacing in order to bring about optimal fabric strength. However, the Examiner has not identified any disclosures in the cited references, nor other prior art that discloses or makes obvious the specific number of tows and/or tow spacing.

Dependent claims 2-16 depend on independent claim 1 and for at least this reason, are also patentable.

Response to Rejection of Claims 17-34 Under 35 U.S.C. §103(a)

In the outstanding Office Action, claims 17-34 were rejected under 35 U.S.C. §103(a) as being unpatentable over Bompard et al. (U.S. No. 5,484,642) in view of Vane (U.S. No. 5,445,693). These rejections are respectfully traversed.

Independent claim 17 provides a method of making a fabric having a plurality of substantially parallel, aligned tows arranged in tow groups. Each of the tow groups has one or more tows. The spacing between tows in a tow group is less than the spacing between adjacent tow groups. Each tow has a longitudinal axis. The longitudinal axes of the tows are in a coplanar relationship.

As discussed above, the Examiner asserts the combination of the Bompard et al. and Vane references disclose the structure and all of the limitations of Applicant's

independent claim 17. However, for the same reasons as discussed above, neither the Bompard et al. nor Vane references, taken singularly or in combination, disclose the method for making the fabric as claimed in Applicant's independent claim 17.

Dependent claims 18-34 depend on independent claim 17 and for at least this reason, are also patentable.

Conclusion

In view of the above amendments and remarks, Applicants have shown that the claims are in proper form for allowance, and the invention, as defined in the claims, is not taught nor disclosed by the applied reference. Accordingly, Applicants respectfully requests reconsideration and withdrawal of the rejections of record, and allowance of all claims.

Respectfully submitted,

  
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